

E/C

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/693,939	JEONG	
	<b>Examiner</b>	<b>Art Unit</b>	
	Susan S. Lee	2852	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 9/13/05.
2. ☒ The allowed claim(s) is/are 1-36.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
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The following is an examiner's statement of reasons for allowance:

The primary reason for allowance of claims 1-11 is the inclusion of a controller to detect a surrounding condition from a resistance of a transfer roller, to compare the detected surrounding condition with the actual surrounding condition, and to generate a transfer roller exchange signal if the detected surrounding condition is not the same as the actual surrounding condition. The actual surrounding condition is an actual surrounding condition of a charge roller. This is found in all of claims 1-11, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claims 12-22 is the inclusion of a method of detecting a life span of a transfer roller by generating a transfer roller exchange signal based upon a comparing step of the surrounding condition with the actual surrounding condition. The signal is generated if the surrounding condition differs from the actual surrounding condition. This is found in all of claims 12-22, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claims 23-25 and 29 is the inclusion of a controller to compare the reference surrounding condition of the transfer roller with the actual surrounding condition of the transfer roller based on a detected condition of a charge roller. This is found in all of claims 23-25 and 29, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claim 26 is the inclusion of a controller to compare the reference surrounding condition of the transfer roller with the actual surrounding condition of the transfer roller. The actual surrounding condition is

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determined from a resistance of the charge roller. This is found in all of claim 26, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claim 27 is the inclusion of a controller to compare the reference surrounding condition of the transfer roller with the actual surrounding condition of the transfer roller. The actual surrounding condition is determined from a resistance of the transfer roller. This is found in all of claim 27, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claim 28 is the inclusion of a controller to compare the reference surrounding condition of the transfer roller, detected by a second detector, with the actual surrounding condition, detected by a first detector, of the transfer roller. The first and second detectors are ammeters. This is found in all of claim 28, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claim 30 is the inclusion of a controller to compare the reference surrounding condition of the transfer roller with the actual surrounding condition of the transfer roller. The actual and reference surrounding conditions are humidities. This is found in all of claim 30, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claim 31 is the inclusion of a controller to compare the reference surrounding condition of the transfer roller with the actual surrounding condition of the transfer roller. The actual surrounding condition is determined from an electric current in the charge roller. This is found in all of claim 31, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claim 32 is the inclusion of a controller to compare the reference surrounding condition of the transfer roller, detected by a second detector, with the actual surrounding condition, detected by a first detector, of the transfer roller. The first and second detectors are voltmeters. This is found in all of claim 32, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claim 33 is the inclusion of a controller to compare the reference surrounding condition of the transfer roller with the actual surrounding condition of the transfer roller. The reference surrounding condition is determined from an electric current in the transfer roller. This is found in all of claim 33, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claim 34 is the inclusion of a controller to compare the reference surrounding condition of the transfer roller, detected by a second detector, with the actual surrounding condition, detected by a first detector, of the transfer roller. The second detector is a thermometer. This is found in all of claim 34, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claim 35 is the inclusion of method of detecting a condition of a charge roller; a reference surrounding condition of a transfer roller; an actual surrounding condition of the transfer roller according to the detected condition of the charge roller; and determining a time to replace the transfer roller if the reference surrounding condition differs from the actual surrounding condition. This is found in all of claim 35, but not disclosed nor suggested by the prior art of record.

The primary reason for allowance of claim 36 is the inclusion of method of detecting a condition of a charge roller; a reference surrounding condition of a transfer roller; an actual surrounding condition of the transfer roller; and determining a time to replace the transfer roller if the reference surrounding condition differs from the actual surrounding condition. The determining time for the replacement of the transfer roller further comprises determining that a number of printed pages is greater than a predetermined number of printed pages. This is found in all of claim 36, but not disclosed nor suggested by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan S. Lee whose telephone number is 571-272-2137. The examiner can normally be reached on Mon. - Fri., 10:30-8:00, Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Art Grimley can be reached on 571-272-2136 or 571-272-2800 (Ext. 52).

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The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Susan S. Lee  
Primary Examiner  
Art Unit 2852

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